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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/551,242	07/24/2006	Mark Watson	BGN.0024US (N5409-US)	4283
21906 7590 01/20/2011 TROP, PRUNER & HU, P.C. 1616 S. VOSS ROAD, SUITE 750 HOUSTON, TX 77057-2631			EXAMINER VIANA DI PRISCO, GERMAN	
			ART UNIT 2617	PAPER NUMBER
			MAIL DATE 01/20/2011	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/551,242	Applicant(s) WATSON ET AL.	
	Examiner GERMAN VIANA DI PRISCO	Art Unit 2617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 December 2010.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
2. Claims 1-3 and 5-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sarkkinen et al. (Pub.: No.: US 2003/0157949 A1, hereinafter Sarkkinen-949), and further in view of Calvignac et al. (Patent No.: US 6,785,278 B1, hereinafter Calvignac).

Consider claims 1, 5 and 8, Sarkkinen-949 discloses a method, means and a wireless station for providing a service to wireless stations through a telecommunication network, the service being identified by a unique service identifier (multicast service announcement identification information such as a multicast service address, paragraph 46) stored in the telecommunication network (UTRAN 12 and CN 10) and in at least one subscriber station among said wireless stations (UEs 14,16), the method comprising the steps of:

- determining a paging identifier in the telecommunication network and at said subscriber station including the unique service identifier (the UE receives Paging Indicator bits with information about current and future services transmitted or to be transmitted by the network, the Paging Indicator bits include identification information such as a multicast service address, paragraphs 33- 35 and 46);
- associating said subscriber station with the determined paging identifier (the

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first four bits Paging Indicator bits may indicate group identification, based on which UE is authorized to receive multicasts, see paragraphs 33, 46 and 47); and

- prior to transmitting information pertaining to the service over a broadcast channel, transmitting a paging message incorporating said paging identifier to the wireless stations (the UE receives Paging Indicator bits with information about future services to be transmitted by the network, the Paging Indicator bits include identification information such as a multicast service address, paragraphs 33- 35 and 46).

However Sarkkinen-949 does not expressly disclose applying a hash function to a data string including at least part of the unique service identifier.

In the same field of endeavor Calvignac discloses applying a hash function to a data string including at least part of the unique service identifier (Calvignac discloses that the use of a hash function in IP routing is well known in the art. By applying a hash function to a 32 bit IP address, the number of bits is reduced. See col.1, ll. 17-26).

Therefore it would have been obvious to a person of ordinary skill in the art at the time the invention was made to apply a hash function as disclosed by Calvignac to the data string including at least part of the unique service identifier such as the multicast service address disclosed by Saarkinen-949 to increase processing speed.

Consider claims 2, 6, and 9 and as applied to claims 1, 5 and 8 respectively above, Sarkkinen-949 further discloses wherein the information pertaining to the service, transmitted over the broadcast channel, includes the unique service identifier, and wherein a wireless station associated with said paging identifier responds to the

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paging message by switching to the broadcast channel, receiving the transmitted unique service identifier and checking whether the received service identifier matches the service identifier stored in said wireless station (the UE can detect whether it has been configured to receive a particular multicast service by comparing multicast service numbers transmitted in System Information Block message transported by the Broadcast Channel, then the UE can receive the paging identifier which indicates the time when the network starts to transmits the next multicast session; if the user equipment notices that the network is sending multicast service of which the user equipment is entitled, the user equipment may start to listen from the air interface, see paragraphs 14, 33, 37-40 and 43).

Consider claims 3, 7, and 10, and as applied to claims 1, 5 and 8 respectively above, Sarkkinen-949 further discloses wherein said data string further includes an indication of a type of the service (e.g. service identification, paragraph 46).

3. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sarkkinen et al. (Pub.: No.: US 2003/0157949 A1, hereinafter Sarkkinen-949), and further in view of Calvignac et al. (Patent No.: US 6,785,278 B1, hereinafter Calvignac), and further in view of Sarkkinen et al. (Pub.: No.: US 2004/0102212 A1, hereinafter Sarkkinen-212).

Consider claim 4, and as applied to claim 1 above, Sarkkinen-949 as modified by Calvignac does not expressly disclose that the unique service identifier includes an

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address associated with the service and an indication of a scope within which said address is unique.

In the same field of endeavor Serkkinen-212 expressly discloses that the unique service identifier includes an address associated with the service and an indication of a scope within which said address is unique (e.g. the combination of the PDP address and the APN uniquely identifies the MBMS service, paragraph 55).

Therefore it would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine the teachings of Sarkkinen-212 with the teachings of Sarkkinen-949 and Calvignac to improve efficiency and resource utilization in access networks.

Response to Arguments

4. Applicant's arguments filed 12/28/2010 have been fully considered but they are not persuasive.

The Applicant argues that the obviousness rejection is defective, that Sarkkinen-949 does not disclose or hint at "determining a paging identifier in the telecommunication network and at said subscriber station, by applying a hash function to a data string including at least part of the unique service identifier."

The Examiner respectfully disagrees because Saarkkinen'949 teaches that a user equipment (UE) can find out what service the network is currently transmitting, and which service will be the next service by the information transmitted on a Paging Indicator Channel (PICH) which in current systems is devoted only for the transmission of Paging Indicator bits (see paragraph 34). However Sarkkinen-949 is silent regarding

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applying a hash and the Examiner has relied upon Calvignac to teach that particular feature. The Applicant further submits that Fig. 5 of Sarkkinen -949 shows a diagram of the structure of a PICH frame having 9 bits for an indication and three bits for an indication type, and argues that Sarkkinen '949 is completely silent about the paging identifier of this frame and only lists the contents of this frame. The Examiner does not think that Sarkkinen '949 is completely silent about the paging identifier. For example, in paragraph 46 Sarkkinen-949 teaches that the indication field may be used for transmission of multicast service announcement.

The Applicant further cites paragraphs 16 and 31 in Sarkkinen-949 and argues that the skilled person can only learn that the paging indicator channel should address all user equipments within the cell and not merely particular ones which are to receive a subscribed_service. And further that, Sarkkinen '949 does not disclose determining a paging identifier at the subscriber station.

The Examiner respectfully disagrees because that the paging indicator channel can be received by all user equipments within the cell does not necessarily mean that the paging information is directed to all user equipments, the user equipment needs to make the determination whether the paging information is meant for it or for some other user equipment. The 288 Paging Indicator (PI) bits (see paragraph 44) are used to notify a particular use equipment that a paging message will be transmitted via a paging channel (PCH).

The Applicant further argues that Sarkkinen-949 does not disclose or hint at to associate such an identifier to the subscriber station. The Examiner respectfully

disagrees because the Paging Indicator (PI) is in transmitted in the same frame as the indication bits.

The Applicant further argues that Sarkkinen-949 does not disclose or hint at "prior to transmitting information pertaining to the service over a broadcast channel, transmitting a paging message". The Applicant points to paragraph 16 in Sarkkinen-949 where Sarkkinen-949 discloses the RNC continuously sends multicast service announcements in a frame over a channel such as a paging indicator channel (PICH) and argues that "continuously" is not "prior."

The Examiner respectfully disagrees because in paragraph 34 Sarkkinen-949 discloses that the user equipment (UE) may try to find out what service will be the next service, and that this information is transmitted on a PICH channel. Therefore the information is transmitted prior to the transmission of the service. That the multicast service announcements are transmitted continuously does not necessarily imply that they are sent after the service has started.

The Applicant further argues the combination of Calvignac and Sarkkinen-949 would not lead to applying a hash function to a data string including at least part of the unique identifier for said service because the paging identifier according to Sarkkinen-949 is in no way disclosed to be related to the service identifier.

The Examiner respectfully disagrees because in paragraph 46 Sarkkinen-949 teaches that the indication field may be used for transmission of multicast service announcement.

Conclusion

Any response to this Office Action should be **faxed to** (571) 273-8300 **or mailed to:**

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Hand-delivered responses should be brought to

Customer Service Window
Randolph Building
401 Dulany Street
Alexandria, VA 22314

Any inquiry concerning this communication or earlier communications from the examiner should be directed to GERMAN VIANA DI PRISCO whose telephone number is (571)270-1781. The examiner can normally be reached on Monday through Friday 8:30-5:00 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kent Chang can be reached on (571) 272-7667. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/German Viana Di Prisco/
Examiner, Art Unit 2617
January 11, 2011

/Kent Chang/
Supervisory Patent Examiner, Art
Unit 2617